4.1.1. Agricultural Water Quality Management Program

The Agricultural Water Quality Management Act (ORS 568.900 to 568.933) authorizes ODA to develop Agricultural Water Quality Management (AGWQMP) Area Plans (area plans) and rules throughout the state. If the EQC has determined that a TMDL is necessary for a water body, DEQ establishes a groundwater management area, or an agricultural water quality management plan is otherwise required by state or federal law, ORS 568.909.

The statute also authorizes the development of Agricultural Water Quality Management Area Rules (area rules) to serve as a regulatory backstop to the voluntary efforts described in the area plans. ORS 561.191 states that ODA shall develop and implement any program or rules that directly regulate farming practices to protect water quality.

The Agricultural Water Quality Management Program is the main regulatory tool to prevent and control nonpoint source pollution from agricultural lands. Water quality standards and TMDL load allocations for agricultural lands should be met through implementation of area plans and enforcement of area rules. The program also is involved with the development of Ground Water Management Act action plans and leads implementation for agricultural nonpoint sources to improve groundwater quality.

ODA began developing AGWQMP area plans in 1993 with passage of the Agricultural Water Quality Management Act in watersheds where water quality issues were identified as required by state and federal law. The reasons for initiating this planning process were a listing under section 303(d) of the federal Clean Water Act and declaration of Ground Water Management Areas.

ODA has adopted area plans and rules for all 38 regions of Oregon. Each of these area plans were developed with a local advisory committee (LAC) consisting of stakeholders residing in the watershed. The LACs were responsible for working with ODA in the development of a draft area plan to address water quality issues from agricultural activities in its area. Each plan is reviewed and revised about every two years, and the LACs play an important role. All of the area plans have undergone at least several biennial reviews.

Commented [CJ1]: This was an intended but in practice longer than 2 years. May want to include both the intention and the reality (how frequently are the plans reviewed in practice). Also need to discuss the concept of a light reviews.

ODA is a Designated Management Agency (DMA) for TMDL implementation. ODA has been a partner for TMDL development. DEQ's basin coordinators and ODA staff have ongoing working relationships with the review and implementation of area plans, as well as local water quality issues related to drinking water. Soil and Water Conservation Districts (SWCDs) have contractual relationships with ODA to act as a local management agencies (LMAs) to meet water quality goals on agricultural lands.

Area plans must describe a program to achieve the water quality goals and standards necessary to protect designated beneficial uses related to water quality, as required by state law (OAR 603-090-0030(1) and the federal CWA.

At a minimum, an area plan must:

- Describe the geographical area and physical setting of the Management Area
- List water quality issues of concern
- List impaired beneficial uses
- State that the goal of the area plan is to prevent and control water pollution from agricultural activities and soil erosion in order to achieve applicable water quality standards
- Include water quality objectives
- Describe pollution prevention and control measures deemed necessary by the Oregon Department of Agriculture (ODA) to achieve the goal
- Include an implementation schedule for measures needed to meet applicable dates established by law
- Include guidelines for public participation
- System for developing recommended changes, tracking system for changes and effectiveness of the changes—tracking implementation actions to show how TMDL allocations are being met.
- Describe a strategy for ensuring that the necessary measures are implemented

The area plans as well as the reports can be found at the following link: http://egov.oregon.gov/ODA/NRD/water_agplans.shtml.

Commented [CJ2]: Does this include exceedances of water quality numeric/narrative criteria and 303d impaired waters listings?

4.1.1.1 Memorandum of Agreement

DEQ and ODA negotiated and signed a Memorandum of Agreement in May 2012. The MOA is intended to guide the agencies to fulfill respective legal responsibilities and obligations in an efficient and effective manner.

The following objectives are applicable to DEQ staff and management:

Commented [CJ3]: How will these objectives be achieved? Give examples, and describe the how. For example, what support (in terms of specific activities) will be provided to develop and implement AFWQMP area plans or rules?

- Leverage and strategically invest funds and resources by engaging in local and statewide watershed protection and restoration efforts.
- Support ODA to develop and implement AGWQMP area plans that would, when implemented, achieve TMDL load allocations and water quality standards including groundwater.
- Support ODA to develop and ensure compliance of AGWQMP area rules that would, when implemented, help achieve TMDL load allocations and water quality standards.
- Evaluate program effectiveness by designing, coordinating, and conducting water quality monitoring projects and compare with implementation activities.
- Capitalize on Water Quality Pesticide Management Team (WQPMT) partnerships to develop and implement a Pesticide Management Plan that would, when implemented, achieve water quality standards and other benchmarks including groundwater protection.

4.1.1.2. Other programs and partners

- DEQ works with other partners and ODA programs to meet water quality goals for agricultural lands. The following programs and partnerships are active in Oregon:
  - Conservation Effectiveness Partnership (CEP) NRCS, OWEB, ODA, and DEQ). USDA-NRCS, OWEB, ODA, and DEQ recognized a benefit to the public and agencies if the programs could more readily share information, and began exploring opportunities for collaboration on the shared grant program goals of improving water quality, watershed functions and processes. The agencies signed a memorandum of understanding in 2010 to formalize this collaboration and allow the sharing of certain types of data.

The goals of the partnership are to:

Commented [CJ4]: How will be these objectives be achieved? How will it be done? Provide specific examples. Need more details on the implementation.

  - Build an understanding of the extent of the investment in watershed improvement actions through the agencies' collective grant programs;
  - Develop a better understanding of how local organizations are utilizing the agencies' respective grant programs, in concert;
  - Evaluate the impacts of grant investments on water quality and watershed health;

- Describe gaps in the treatment of watersheds; and
- Design tools and methods to report accomplishments to the public.

- The partner agencies selected two "pilot watersheds", the Wilson River in Tillamook Bay, and Wychus Creek along the Upper Deschutes River. The pilots were selected due to the length of time and investment of grant program dollars, the magnitude of projects undertaken, the availability of current data sets for these watersheds, and the potential to detect trends of change.(3.2.4 MOA between NRCS, OWEB, ODA, and DEQ).
- Water Quality Pesticide Management Program (ODA, DEQ, ODF, OHA, OWEB, OSU).
- Local and Statewide groups for strategic implementation.
  There are a number of committee meetings held at the state and regional level in order to develop and implement strategies for implementation:
  - Oregon Technical Advisory Committee (OTAC): The Natural Resources Conservation Service (NRCS) State Conservationist and Farm Service Agency (FSA) State Director co-chair the OTAC under section 1446 of the 1990 Farm Bill. The Oregon USDA established the committee to provide advice for technical considerations and guidance for implementing programs in the Farm Bill such as Environmental Quality Incentive Program and Conservation Innovation Grants.
  - Local and Basin Work Groups: NRCS holds meetings in each basin and county to allocate available funding in strategic manner.
  - OWEB grants review group: OWEB convenes regional and statewide teams used to prioritize and recommend projects for OWEB funding.

4.1.3. Nonpoint Source Program Priorities

4.1.3.2 Focus Areas and Strategic Implementation Areas

ODA went through a strategic planning process in 2012. This was followed in May 2012 with an Oregon Board of Agriculture action item recommending that ODA develop additional alternatives to a complaint-based water quality program. The Board further recommended that the AGWQMP Program devote more resources to building relationships, plan implementation, and compliance. To reinforce this goal, in March 2013 the Board passed Resolution 331. The resolution supports ODA to establish a strategic program implementation process that identifies key geographic areas (strategic implementation areas) and targets resources to achieve compliance with local water quality regulations. The Board of Agriculture resolution noted that the effort should be founded on the basic conservation principles of erosion control, nutrient management, stream bank stabilization, and moderation of solar heating of streams, promoted by aligning resources with local, state and federal natural resource partners.

Commented [CJ5]: Please update. How well is the strategic program implementation process working?

Within strategic implementation areas, ODA will do a pre-assessment to identify locations likely not meeting water quality regulations. ODA will then work with local, state, and federal partners to outreach to agricultural landowners in the area, with a focus on those properties that are likely not in compliance. Following the outreach period, ODA will identify locations likely not meeting water quality regulations and schedule site visits to seek compliance. ODA will then do a post-assessment to measure change and communicate progress.

ODA has asked SWCDs to select "Focus Areas" for implementation in each management area. Focus Areas concentrate limited outreach, technical assistance, and financial assistance resources in smaller geographic areas where change may be measured faster. These efforts are focused on impaired areas since they are seen as the best, most effective way to prioritize staff and funding to improve water quality.

4.1.4. The NPS Program Measures, Timelines, and Milestones

The following strategies are applicable to DEQ staff and management between 2014 and 2019. Schedule may be revised based on annual prioritization process and implemented accordingly. DEQ currently works on many of the tasks identified here:

Statewide/Programmatic Projects:

- DEQ's projects often involve partners. DEQ will continue to seek opportunities to collaborate with others. (Ongoing)
- Protection of high quality waters are prioritized locally through Basin Planning process. In addition, protection is considered during triennial review. (Ongoing)
- Basin priorities for agriculture are identified through basin plan development process to ensure decisions are made while considering unique water quality issues. (Ongoing)
- DEQ works with local, state, and federal partners that provide technical assistance to producers to promote conservation practices and restoration. DEQ will continue those partnerships. (Ongoing)
- DEQ considers AGWQMP to be a key program for implementation. Review and update AWQM Program biennial review guidance document. (Annually)
- DEQ considers various programs that provide funding for implementing conservation practices and protection to be key programs for implementation. DEQ will continue to participate in existing statewide efforts to direct funds, and continue to seek other opportunities. (Ongoing)
- DEQ considers TMDL to be a key program for implementation. Revise and finalize TMDL Guidance document. (4/2014 to 4/2015, revise as necessary)
- Develop and incorporate source water protection guidance into AGWQMA Program biennial review guidance document. (Annually)
- Develop and provide training related to agricultural land use, policy, and regulations to staff and partners. (As resources allow)

Commented [CJ6]: How are these basin priorities linked with state priorities? How are the basin plans linked together in priority setting?

Commented [CJ7]: Instead of reviewing the guidance document annually, consider reviewing the changes (or improvements based on defined needs) in the Ag Plans annually.

4.1.5 ODA's Tracking

ODA keeps records of compliance related information, as well as summarizes and reports annually to interested entities including Oregon DEQ. ODA and the SWCDs also produce reports associated with AWQMA Plan biennial reviews. The reports include updates on compliance and monitoring efforts as well as a summary of progress toward plan objectives and targets on outreach and on the ground projects.

Commented [CJ8]: What proactive approaches (as opposed to complaint driven) are being used with respect to compliance and monitoring and what kind of information is collected for those approaches?

DEQ's regional staff provides technical assistance and coordinates with ODA's water quality specialists to review the area plans and provide information for the reports as resources allow. ODA followed up on complaints by conducting site visits or driving by the sites. More compliance investigations were initiated due to issues related to manure management than other water quality issues. The area plans as well as the reports can be found at the following link: http://egov.oregon.gov/ODA/NRD/water_agplans.shtml.

4.2 State and Private Forest Lands

Oregon's NPS program for forestry uses cooperation between Oregon's DEQ and ODF, respectively to reduce and prevent NPS pollution from non-federal forestlands. Under the Oregon Forest Practices Act (FPA), ODF has exclusive jurisdiction over water quality regulation on non-federal forestlands unless additional protections are required by the federal Clean Water Act.

Under ORS 468B.110(2), ORS 527.765, and ORS 527.770, the Board of Forestry establishes best management practices or other control measures by rule that, to the maximum extent practicable, will ensure attainment and maintenance of water quality standards. If the Environmental Quality Commission does not believe that the FPA rules will accomplish this result, the EQC is authorized to petition the Board for rules that are more protective. If the EQC petitions the Board for review of BMPs, the Board has two options: terminate review with the EQC concurrence, or begin rulemaking. If the Board determines that BMPs should be reviewed, rules specifying the revised BMPs must be adopted not later than two years from the filing date of the petition for review, unless the Board, with concurrence of the EQC, finds that special circumstances require additional time.

Upon the EQC's request, the Board is required to take interim action "to prevent significant damage to beneficial uses" while the BMPs are being reviewed. The "BMP shield" under ORS 527.770 is lost if the Board fails to complete BMP revisions, or makes a finding that revisions are not required, within the statutory deadline. In addition, under 468B.110(2), the EQC cannot adopt rules regulating nonpoint source discharges from forest

operations and the DEQ cannot issue TMDL implementation plans or similar orders governing forest operations unless "required to do so by the CWA." This authority would also be triggered by the failure of the Board to adopt adequate BMPs to implement TMDL allocations for forestry or to avoid impairment of water quality such that standards are not met.

The FPA Rules and Best Management Practices (BMPs) protect natural resources including water quality. The FPA rules are periodically evaluated to insure that forest practices do not contribute to violations of water quality standards and those changes to rules be evaluated if the state Board of Forestry finds evidence of resource degradation and the public policy process under ORS 527.714 is completed. ODF has existing processes in place that help guide the work of staff by establishing work priorities.

A few examples of these processes follow:

The Forestry Program for Oregon, which describes the mission, values, vision, goals, objectives, and indicators of sustainable forest management. The Oregon Board of Forestry has developed a Board work plan designed to describe major topics that the Board will discuss based on information from staff. The Private Forests Division has also developed an Annual Operations Plan (AOP) that is the framework for staff priorities for the current year. These processes will be used by DEQ to identify common priorities and tasks, and priorities are developed with opportunities for DEQ's input.

ODF has completed a monitoring strategy to establish priorities for monitoring. Oregon DEQ works cooperatively with ODF to evaluate rules and BMPs, design, implement, and analyze studies of forest practice effectiveness, and alter rules and BMPs when necessary This sequence of actions allows ODF to work in a "plan-do-check-act" cycle that affords continuous improvement of the FPA over time. An example of this process is the changes to the road rules over time to prevent sediment movement from forest roads into waters of the state.
ODF and DEQ have the following State and Private Forest Lands Priorities:

- In cooperation with ODF Private Forest Division staff, ensure that water quality standards are being attained, TMDL load allocations are being met, and beneficial uses are being supported on private forestlands in Oregon.
- Evaluate voluntary implementation of Oregon Plan for Salmon and Watersheds in reducing water quality risks and impacts, identify information gaps, and collect additional information as needed in cooperation with ODF and landowners.
- Evaluate effectiveness of Oregon Plan for Salmon and Watersheds in reducing water quality risks and impacts.
- Review any changes to state forest management plans and work with ODF State Forest Division staff so changes to plans continue to protect water quality and beneficial uses on state-owned forestlands.

ODF and DEQ have the following State and Private Forest Lands Objectives:

- Continue evaluation of small and medium fish-bearing stream protection rules with respect to the Protecting Cold Water criterion of Oregon's temperature standard and temperature TMDL load allocations under the Human Use Allowance.
- Continue contributing to evaluation of RipStream data on riparian stand characteristics to determine if riparian stand function under the FPA and state forest management plans will provide adequate large woody debris recruitment for maintenance and creation of aquatic habitat, sediment regulation, and cold-water refugia.
- Discuss sufficiency of FPA for protection of water quality and beneficial uses with regard to small non-fish-bearing streams, landslide-prone areas, sediment-related processes, pesticide use (see PSPs), and drinking water sources by assisting ODF with their monitoring strategy and through data analysis and funding, as needed.
- Provide review on any proposed changes to state forest management plans that may impact water quality.
- Collect information on voluntary measures implemented under the Oregon Plan.

Commented [CJ9]: What does discuss mean? Does this mean to evaluate? Decide on actions to take? What direction will the state take?

4.2.2 Forest Practices Act Sufficiency Analysis

Analysis of Oregon FPA sufficiency relates to Objective 3 above.

Oregon's DEQ and ODF completed "Sufficiency Analysis: A Statewide Evaluation of Forest Practices Act Effectiveness in Protecting Water Quality" in 2002. The Sufficiency Analysis described forest practice rules and their degree of certainty in terms of meeting water quality standards. It identified, among other things:

- Uncertainties in the ability of riparian rules for small and medium fish-bearing and non-fish-bearing streams to meet the temperature standard;
- Uncertainties in the ability of riparian rules for small and medium fish-bearing and non-fish-bearing streams to provide enough large woody debris over time for habitat creation and maintenance;
- Road rules being insufficient to meet turbidity and sedimentation standards due to inadequate cross-drain spacing and wet-weather hauling problems;
    - Corrected in 2003 rule changes;
- Adequacy in current fish passage rules when implemented.

While the Sufficiency Analysis did contain discussion of forest practice (specifically clear cutting) effects on shallow landslide processes, it did not reach any conclusions or evaluate whether current rules for harvest on landslide-prone areas are protective of water quality. There are landslide rules in effect for public safety considerations. There is also a lack of information on upgrades to roads built before the current rules were in effect. Some locations (e.g. steep side slopes and riparian/floodplain areas), types of construction (e.g. cut-and-fill), and stream crossings represent a higher risk for catastrophic failures.

Voluntary upgrades and storm proofing have been extensive, but there is little information about remaining risk on the landscape. In addition, the science around sediment regimes has advanced over the last decade and recent monitoring shows low-levels of herbicides applied in forestry are reaching surface waters, and there are water quality problems (turbidity) for Public Water Systems in the Coastal Zone that may be related to forest practices.

The NPS program plans an evaluation of FPA sufficiency for small non-fish-bearing streams, landslide-prone areas, sediment processes, pesticides, and drinking water protection. This would incorporate past and ongoing agency work (e.g. Turbidity Report on Coast Range Public Water Systems, FPA compliance monitoring, Regional Solutions projects, PSPs, MidCoast TMDL work) and research (e.g. peer-reviewed studies; Trask, Alsea, Hinkle Creek watershed studies). It might also require new monitoring projects, so scoping and perhaps initiation of those studies would take place during the next 2 years.

Commented [CJ10]: When will this happen? Target date?

The NPS Program Measures, Timelines, and Milestones:

The NPS Program Measures, Timelines, and Milestones:

- Continue to participate in ODF/BOF rule work for evaluation of changes to stream protection rules for small and medium fish-bearing streams [Complete during 2014].
- Participate in analysis of riparian stand information to determine if large wood recruitment and other riparian functions are being maintained [Cooperate with ODF in creating a timeline during 2014; Continue assisting ongoing analysis]
- Continue working with ODF to ~~ensure~~ determine the best approach for ensuring that water quality standards are being met with regard to small non-fish-bearing streams, landslide-prone areas, sediment processes, pesticide use, and drinking water sources on nonfederal forestlands. [In cooperation with ODF during 2014-15]
    - If necessary, create plan to remedy risks and impacts not covered by current rules [In cooperation with ODF by December 2016]
- Update the 1998 MOU between ODF and DEQ [In cooperation with ODF by December 2015]
- Review proposed changes to state forest management plans and comment as needed to ensure state forest plans will meet water quality standards and TMDL load allocations. [As necessary]

Commented [CJ11]: Since WQS are not being met now, makes more sense for DEQ to determine an approach to ensure WQS will be met.

- Collect information on work done under the Oregon Plan and remaining water quality risks and impacts not covered by combination of forest practice rules and Oregon Plan implementation. [In cooperation with ODF by December 2015]
    - If necessary, create plan to remedy risks and impacts not covered by rules and Oregon Plan [In cooperation with ODF by December 2016]

4.3 Federal BLM and USFS Lands

4.3.2 Revision of BLM Resource Management Plan and EIS for Western Oregon

In March 2012, the BLM began the process of revising the Resource Management Plans (RMPs) for 2.5 million acres of forested lands across six BLM Districts in western Oregon. BLM intends to revise the six RMPs with an associated EIS for the Western Oregon Planning Area. BLM has begun the scoping process, to determine the scope of issues to be addressed by the environmental analysis, including alternatives and the significant issues related to the planning process.

Commented [CJ12]: Needs to be updated. The scoping process has been completed.

The Federal Land Policy and Management Act of 1976 (FLPMA) requires the development, maintenance, and revision of land use plans. Preparation of the RMPs and EIS will conform to federal and state management laws including the Endangered Species Act, the Clean Water Act, and the National Environmental Policy Act.

In 2012, the State of Oregon signed an MOU defining the process and scope of the state's involvement in developing an RMP that involves and receives better understating of how the state and federal clean water act and state rules and regulations are included in the RMP. DEQ, ODF, ODFW, and DSL directors signed the MOU. The key federal and state natural resources agencies are members of the Cooperating Agencies Advisory Group and technical workgroups such as riparian/aquatic resources.

BLM is on a schedule to have a final RMP and EIS completed by 2015.